



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,150	01/19/2006	Pieter Willem Jedeloo	NL030882	7335
65913	7590	01/31/2008	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			HSIEH, PING Y	
			ART UNIT	PAPER NUMBER
			2618	
			NOTIFICATION DATE	DELIVERY MODE
			01/31/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/565,150

Applicant(s)

JEDELOO, PIETER WILLEM

Examiner

Ping Y. Hsieh

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/19/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodim (U.S. PATENT NO. 7,005,940).

-Regarding claims 1, 11 and 12, Kodim discloses antenna switch which is arranged to alternately operate in a receive mode and a transmit mode (**antenna switch 10 as disclosed in fig. 3a**), the antenna switch comprising an adaptive

filter (**multiband transformation stage 14 as disclosed in fig. 3a**) for coupling a signal processing means to an antenna during the receive mode (**an input/output port configured as antenna port 22 are each coupled to a node 24 as disclosed in fig. 3a and further disclosed in col. 7 lines 9-10**) and for electrically insulating the signal processing means from the antenna (1) during the transmit mode (**as disclosed in fig. 3a and col. 8 lines 27-44**).

-Regarding claim 2, Kodim further discloses the signal processing means are electrically insulated from the antenna by controllably configuring the adaptive filter such that the adaptive filter is coupled between the antenna and ground during the transmit mode (**as disclosed in fig. 3a and col. 8 lines 27-44**).

-Regarding claim 3, Kodim further discloses the adaptive filter is a high-impedance filter during the transmit mode (**as disclosed in fig. 3a and col. 8 lines 27-44**) and a low-impedance filter during the receive mode (**as disclosed in fig. 3a and col. 9 lines 49-55**).

-Regarding claims 4 and 5, Kodim further discloses the adaptive filter (30) has a first passband during the transmit mode (**transmit GSM 1800/GSM 1900 mode and transmit GSM 900 mode as disclosed in col. 8 lines 20-25**) and a second passband (20) during the receive mode (**receive GSM 900/GSM 1800 mode as disclosed in col. 8 lines 20-25**).

-Regarding claim 6, Kodim further discloses a switch device through which the signal processing means is coupled to the adaptive filter (**low power stage 16 as disclosed in fig. 3a and further disclosed col. 8 lines 3-6**).

-Regarding claim 7, Kodim further discloses the switch device is a low-power switch device (**see col. 6 lines 1-17**).

-Regarding claim 8, Kodim further discloses the low-power switch device is a low-power pHEMT (**see col. 6 lines 1-17**).

-Regarding claim 9, Kodim further discloses the adaptive filter is further arranged to provide electrostatic discharge protection (**in the transmit modes the low power stage 16 is switched such that the signal output 26 of the multiband transformation stage 14 is coupled to the auxiliary port 62 which is terminated with a specific impedance as disclosed in col. 9 lines 9-13**).

-Regarding claim 10, Kodim further discloses switching devices (**D1 and D2**) to change the geometry of the adaptive filter (**multiband transformation stage 14 as disclosed in fig. 3a**).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tanaka et al. (U.S. PATENT NO. 6,847,829).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Y. Hsieh whose telephone number is 571-270-3011. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 8:00am-5:00pm.

Application/Control Number:
10/565,150
Art Unit: 2618

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana Le can be reached on 571-272-7891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PH



01-18-08

LANA LE
PRIMARY EXAMINER